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A Dorian Middleground Schema in Bach's Minor-Key Fugue Expositions

ABSTRACT

This paper proposes that a Dorian middleground schema exists in many of Bach's minor-key fugues, where the characteristic division of the Dorian mode into a species of fifth and a species of fourth resembles the pairing of structural linear progressions guiding the subject and answer in many minor-key fugue expositions. Following a critical review of prior Schenkerian writings on fugue, especially the work of William Renwick, I will present analyses of several expositions from Bach's fugues, demonstrating structural characteristics of four subject/answer paradigms common in many minor-key fugues. The Dorian middleground schema pursued in this paper suggests a nuanced explanation of the subject/answer relationship in baroque fugues, based in modal thinking rather than abrupt modulation or routine transposition, and illustrates the persistent influence of seventeenth-century modal approaches to fugue on the music of Bach and his contemporaries.

1. INTRODUCTION

Many modern music theory textbooks explain the subject/answer relationship in baroque fugues in terms of contrasting keys, with the subject centered 'in the tonic key', the answer 'in the dominant key'. Others describe this more neutrally as a matter of transposition from subject to answer, usually transposition by perfect fifth above or perfect fourth below.¹ These descriptions are commonplace in modern accounts of fugue; however, it is worth remembering that fugue originated in a modally-oriented musical style. As music transitioned from modality towards tonality, vestiges of modal organization remained a significant presence in the musical language of various composers, particularly the music of Bach and his circle (Leister 1990).

For instance, consider Bach's famous description of the tonal organization in *The Well-Tempered Clavier*, book 1: the title page mentions that he has composed twenty-four preludes and fugues in all of the keys, both in major (where the scale begins *Ut Re Mi*) and in minor (where the scale begins *Re Mi Fa*). Furthermore, Bach's frequent practice of notating minor-key pieces in the 'Dorian' key signature illustrates that even in Bach's time the Dorian mode was still regarded as the progenitor of minor keys, rather than the relative major/minor pairing as taught in most modern music theory textbooks.

Such traces of modal organization similarly remain important for other aspects of eighteenth-century music, and can inform our modern understanding of baroque contrapuntal techniques in general, and Bach's fugues in particular. This paper proposes that a Dorian middleground schema exists in many of Bach's minor-key fugues, where the characteristic division of the Dorian mode into a species of fifth and a species of fourth resembles the pairing of structural linear progressions

guiding the subject and answer in many minor-key fugue expositions. Following a critical review of prior Schenkerian writings on fugue, especially the work of William Renwick, I will present analyses of several minor-key fugue expositions, demonstrating structural characteristics of four subject/answer paradigms common in many minor-key fugues. The Dorian middleground schema pursued in this paper suggests a nuanced explanation of the subject/answer relationship in baroque fugues, based in modal thinking rather than abrupt modulation or simple transposition, and illustrates the persistent influence of seventeenth-century modal approaches to fugue on the music of Bach and his contemporaries.

2. SCHENKERIAN STUDIES OF FUGUE

When it comes to Schenkerian analysis, fugues and other contrapuntal genres pose significant problems to the analyst. Contrapuntal textures in general defy such analysis, given the relative equality of each entering musical voice in terms of melodic and thematic presentation. For instance, the *Ursatz*, the outer-voice structural framework that Schenkerian analysis hinges upon, treats the two parts of the musical texture differently: the upper melodic line moves in a generally descending stepwise manner, while the lower bassline provides harmonic support, generally moving in a leaping manner from tonic to dominant and back. In fugues and other imitative genres, all voices, including the bass, carry equal musical responsibility in providing the important melodic ideas, fundamentally disrupting the typically stratified roles played by each part of the *Ursatz*.

Furthermore, the fugue subject is a relatively short thematic unit, typically self-contained and modular in design. This is an inbuilt aspect of fugue, and allows for the contrapuntal re-combination of the subject or answer with countersubjects and other accompanying music as the fugue unfolds. Thus, it frequently becomes very difficult to glean a conventional Schenkerian *Ursatz* spanning the course of an entire fugue when the generating musical material is short and frequently repeated in each voice multiple times.

Whereas Schenker himself contributed some fugal analyses, and later authors such as Carl Schachter have published articles on individual fugues,² the writings of William Renwick stand out as among the most important and thorough Schenkerian-inspired studies of fugue to date. In particular, Renwick's *Analyzing Fugue: A Schenkerian Approach* (1995) provides a useful starting point to the study of fugue from a Schenkerian perspective. A central aspect of Renwick's approach is the identification of a number of subject/answer paradigms, or pairings of various linear progressions that provide structure and direction to both the subject and answer in fugue. Renwick groups these paradigms into three broad categories based on

¹ For instance, see Roig-Francoli (2003, 547 and 625), Aldwell and Schachter (2003, 456–57), Clendinning and West Marvin (2016, 495), and Holm-Hudson (2017, 430–31).

² For instance, see Schenker (1979, 143–44), Schenker (1996, 57–95), Schenker (1984), and Schachter (1999, 239–59).

characteristics of the subject. His approach is characteristically focused on tonal and harmonic design within fugue: the subjects in category 1 paradigms express tonic harmony throughout, while the subjects in category 2 modulate from the tonic to the dominant key, thus ending on a tonicized dominant. The subjects of category 3 begin with tonic harmony but end by expressing dominant harmony, ending with an active dominant (Renwick 1995, ch. 2). In sum, Renwick identifies seventeen separate paradigms, with nearly as many sub-paradigm variants accounting for differences in real and tonal answers.

Renwick's paradigms have proven useful as a starting point in the study of fugue, though recent scholars such as Sarah Marlowe (2013, 2014) have issued critiques of his approach. One critique that I will add, and that is crucial to my understanding of minor-key fugues as emanating from Dorian-specific structures, is that all of Renwick's paradigms are presented as though precisely the same structures occur in minor-key fugues in the same way as they do within major-key fugues. As I will demonstrate in this paper, there are a number of paradigms driven by structural linear progressions that are specific to certain minor-key fugues, and that seem to emanate from a characteristic division of the Dorian mode, rather than as transformed versions of paradigms found in major keys. I submit that there are certain structural and organizing devices found in minor key pieces only, and a paradigm-driven approach should acknowledge this modal variance, rather than subsuming all variances into a single form, or group of paradigms.

A second critique has to do with the extent to which these paradigms function within larger analyses of whole fugues. Renwick's ultimate goal, like many other Schenkerians, is to reveal deep-level background structures encompassing entire fugues. However, it is unclear how the paradigm approach figures into this, and may occasionally lead to unclear relationships between structural levels. For instance, occasionally a fugue whose subject is structured on a $\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$ linear progression may actually be found within a larger work that expresses a broader $\hat{3}-\hat{2}-\hat{1}$ *Urfinie* structure. This is a central aspect of Marlowe's reconsideration of Renwick's paradigms (Marlowe 2014). This being said, I feel that much contrapuntal detail can be illustrated by focusing on middleground readings of fugue subject/answer patterns, those closer to the musical surface and approximate to Renwick's paradigms, rather than attempting a more complete, background reading of an entire fugue.

Still another issue, one that the current paper seeks to address, is the exclusive reliance among Schenkerian scholars on harmonic and tonal processes in describing various musical structures, rather than other (i.e., modal) aspects of music.³ In general, Schenker dismisses aspects of modality, regarding the millennia-long reign of modal organization in Western musical thought, dating back to antiquity, merely as a historical precursor to the typical Bach-to-Brahms major/minor tonal system. This pattern of dismissal is consistent across Schenker's writings, ranging from his *Harmonielehre* (1906) to his posthumously-published *Der freie Satz* (1935). Schenker's dismissal of modality, and its omission from discussions in later

Schenkerian accounts of fugue, including Renwick, would seem to pose a problem for Schenkerian-influenced studies of fugue, given that fugue has a longer history than the typical major/minor tonal system, and in fact grew out of imitation patterns in modal music. Indeed, the desire to express the essential aspects of a mode in the opening point of imitation was a central concern for renaissance and early baroque composers, far greater than the interplay of tonic and dominant harmonies.

These critiques notwithstanding, I still regard Renwick's subject/answer paradigms as a fruitful way of illustrating intriguing structural relationships in the opening point of imitation of baroque fugues, without necessarily even needing to reveal a deeper *Ursatz* structure for the fugue as a whole. In the following section of this paper I will illustrate how Renwick's paradigm approach can be reconciled with the modal characteristics I hear in the fugues of Bach and his contemporaries.

3. A DORIAN-BASED SCHEMA

With this in mind, I propose a schema that I feel illustrates an intriguing aspect of the subject/answer relationship in minor-key fugues, which I call the Dorian middleground schema. Various scholars, including Leonard Meyer (1989), Robert Gjerdingen (2007), Vasili Byros (2012), John Paul Ito (2013), Janet Bourne and Robert Gjerdingen (2015), and Gilad Rab-inovitch (2018) have devoted articles and entire books to studying musical schemata of many types, with a focus on eighteenth-century galant schemata, though the general concept of schema theory can embrace a multitude of musical styles and interpretations. In this paper I adopt Ito's definition of a schema as 'a memorable [musical] pattern to which varied individual instances may be related, even when those individual instances conform to the scheme only partially' (Ito 2013, 50). Indeed, Renwick's paradigms are really schemata in disguise, or rather, early forerunners of the concept, before the subfield of study had a name and a reliable presence at academic conferences and journal publications.

Figure 1 illustrates the division of the Dorian mode into its characteristic species of fifth (*Diapente*) and fourth (*Diatessaron*). In this paper I will regard these stepwise patterns as a fifth-span and a fourth-span within the Dorian mode. Considering that these fifth- and fourth-spans resemble stepwise linear progressions, one can generate four subject/answer paradigms, as illustrated in figure 2. In the first paradigm, the subject consists of a descending fifth progression, answered by a descending fourth progression. In contrast, the second paradigm shows a rising fifth progression for the subject, followed by a rising fourth progression for the answer. These intervallic spans within the Dorian mode can also be reordered, beginning with the subject presenting a descending fourth progression answered by a descending fifth progression, as illustrated in paradigm 3. Paradigm 4 illustrates a rising fourth progression for the subject, answered by a rising fifth progression. Again, observe that in minor-key fugues, the fifth and fourth progressions of these subject/answer paradigms resemble the characteristic division of the Dorian mode.

³ For a well-known Schenkerian-based study that does consider aspects of modality, see Burns (1995).

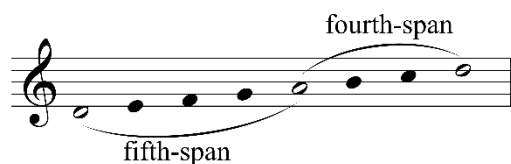


Fig. 1. The Dorian mode.

Before considering examples of this schema in Bach's fugues, I would like to draw out one important distinction between the approach given in this paper to that of Renwick and other Schenkerian authors. Whereas Schenkerians typically focus on the harmonic dimension in fugue (i.e., motion from tonic harmony to dominant and back), the approach proposed in this paper is more concerned with the expression of Dorian modality in the subject and answer, and traces the way the composer develops the fifth-span and fourth-span of the Dorian mode throughout the fugue exposition. The resulting graphics may resemble 'Schenkerian analyses' to the casual observer, though I am more concerned with showing structural modal characteristics in these subject/answer pairings than tonal or harmonic prolongations; as such, the term 'Schenkerian-inspired' may be more fitting to describe the type of analyses that follow.

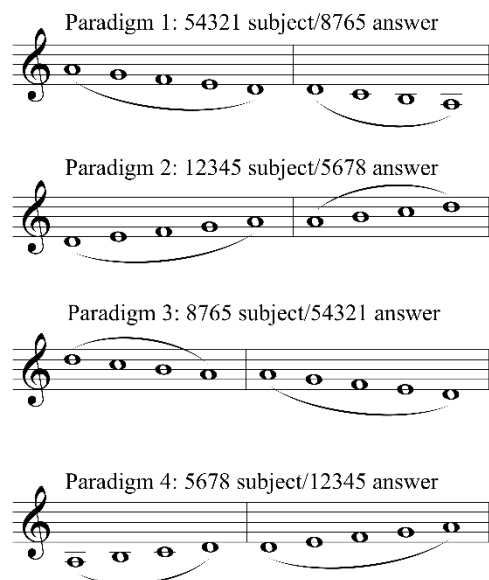


Fig. 2. Four subject/answer paradigms for 'dorian middleground' fugues.

4. EXAMPLES FROM BACH AND HIS CONTEMPORARIES

Figures 3–6 provide instances of subject/answer paradigm 1, where a descending fifth-progression is followed by a descending fourth-progression in the answer. An exceedingly common decoration to this schema appears in Bach's Canzona in D Minor, BWV 588, where an opening leap from scale degree 1 to 5 proceeds immediately to scale degree 6, acting as a neighbor tone to 5 (Figure 3). This neighboring motion is transformed in the answer into an arpeggiation of the tonic harmony, leading to a descending third-progression decorating scale degree 8, before descending through the Dorian fourth-span back to scale degree 5.

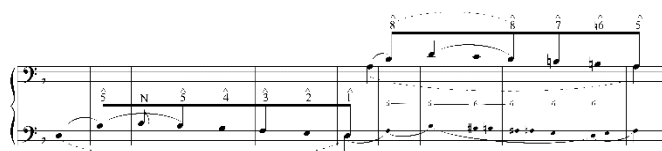


Fig. 3. Bach, Canzona in D Minor, BWV 588, mm. 1–15.

A similar instance of paradigm 1 appears in Bach's Fugue in C Minor, BWV 537, which also shows the neighboring motion in the subject and subsequent transformation into tonic arpeggiation in the answer (Figure 4). The structural pitches of the subject and answer form a complete statement of the Dorian middleground schema described in this paper.

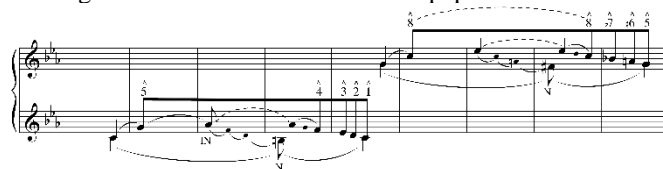


Fig. 4. Bach, Fugue in C Minor, BWV 537, mm. 1–8.

As is well known, the type of imitation in fugue does not exist solely in pieces called 'fugues'. Figures 5–6 illustrate the same subject/answer paradigm in a pair of chorale preludes by Telemann and Pachelbel. Observe that both Telemann and Pachelbel notate their music in the null (zero sharps, zero flats) key signature, indicating a lingering influence of the Dorian mode in conceiving minor-key pieces from prior musical practices. Observe that both composers outline the full Dorian mode, passing through the fifth-span for subject and the fourth-span for answer in their initial point of imitation before the chorale tune enters.



Fig. 5. Telemann, 'Jesu meine Freude', TWV 31/33.



Fig. 6. Pachelbel, 'Durch Adams Fall ist ganz verderbt'.

Compare the transformation of the fifth-span from the subject to become the fourth-span of the answer in these examples. Frequently, the scale degrees 5 and 4 of the descending fifth-progression are mapped onto a repeated scale degree 8 of the descending fourth-span to become the answer. (Thus, the answer resembles more of an $\hat{8}-\hat{8}-\hat{7}-\hat{6}-\hat{5}$ structure.) This is precisely how Renwick describes the relation of subject and answer in his study of paradigms similar to that discussed here (Renwick 1995, 26, examples 2–4). However, Pachelbel's setting of 'Durch Adams Fall' maps the scale degrees 4 and 3 of the subject onto a repeated scale degree 7 of the answer (thus an $\hat{8}-\hat{7}-\hat{7}-\hat{6}-\hat{5}$ structure in the descending fourth-span). Although I suggest the addition of this structure as a possibility within Renwick's paradigms, it is difficult to imagine a successful version of this subject/answer paradigm in a typical major-key fugue, given the pattern of tones and semitones within the linear progressions common of major-key fugues.

As such, this structure may be unique among minor-key fugues adhering to the Dorian middleground proposed in this paper.

Figures 7–9 provide examples of subject/answer paradigm 2, where a rising fifth-progression is answered by a fourth-progression. Observe the chromatic motion in the answer for Bach's Fugue in A Minor, BWV 947, from G to G-sharp; this chromatic adjustment obviates the need for a link before the next subject entrance on A and allows for a two-bar hypermeter to emerge between subject/answer statements in this fugue (Figure 7). This transformation from subject to answer, replacing the scale degrees 3 and 4 of the rising fifth-span with scale degree 7 within the rising fourth-span (albeit with chromatic inflection to form a leading tone) is especially common in paradigm 2 expositions within Dorian middleground fugues.



Fig. 7. Bach, Fugue in A Minor, BWV 947, mm. 1–5.

Paradigm 2 also occurs at the opening of 'Auf meinen lieben Gott', a chorale prelude from Friedrich Wilhelm Zachow (1663–1712), a Leipzig composer and organist associated with Bach (Figure 8). Again, observe the chromatic alteration in the answer, allowing a rising fifth-progression to be answered by a fourth-progression before the broad statement of the chorale tune in the upper voice.



Fig. 8. Zachow, 'Auf meinen lieben Gott', LV 26.

It is worth noting that fugue subjects built on rising fifth-progressions more commonly result in real answers rather than tonal answers as shown here. For instance, Bach's Fugue in D minor from *The Well-Tempered Clavier*, book 1 features a rising fifth-progression of the subject, followed immediately by a rising fifth-progression in the dominant key area for the answer.⁴ In fact, some modern textbooks on counterpoint prescribe real answers for such subjects that delay the arrival of the dominant scale degree until late in the fugue subject, such as those structured on a rising fifth progression discussed here.⁵ However, at least one esteemed authority on counterpoint identifies another option for crafting an answer, framed largely by modal considerations rather than transposition. Figure 9, taken from Johann Mattheson's *Der vollkommene Capellmeister* (1739), illustrates another instance of subject/answer paradigm 2, again displaying the characteristic chromatic alteration of scale degree 7 in the answer. Rather than relying solely on routine transposition for such subjects, Mattheson

⁴ See Schenker (1979, fig. 53, 5) for his analysis of the first subject/answer statement in this fugue.

⁵ Renwick (1995, 64) provides a demonstration of this in his subject/answer paradigm 13 and provides the possibility of a tonal answer to such subjects (mapping the scale degrees 1 and 2 of the subject onto a repeated scale degree 5 in the answer), but does not provide an example from the literature.

focuses on the modal outline of the Dorian mode as the generating impulse for this subject/answer pairing.

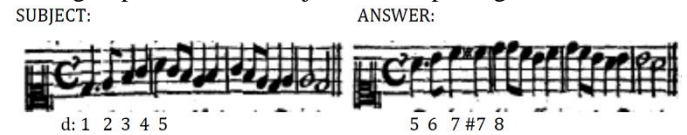


Fig. 9. A subject/answer pairing in Mattheson (1739, 372).

By re-arranging the fifth-span and fourth-span of the Dorian mode, one can generate two other subject/answer paradigms. Bach's Prelude and Fugue in G minor, BWV 131a, illustrates subject/answer paradigm 3, with a descending fourth-progression in the subject, moving through scale degrees 8, 7, 6, and 5 within the Dorian mode, followed by a descending fifth-progression for the answer (Figure 10). This paradigm is considerably less common in the musical literature than those noted above, but effectively portrays the bizarre, modally-inflected opening of this fugue and the subject/answer relationship throughout.



Fig. 10. Bach, Fugue in G Minor, BWV 131a.

A similar example of this paradigm appears in 'Jesus Christus unser Heiland', a keyboard prelude by Johann Christian Kittel (1732–1809), one of Bach's last organ students (Figure 11). Observe that once the subject is stated, Kittel immediately reverses direction in the left hand at m. 3, passing directly through the ascending fourth-span of the Dorian mode, once again with the chromatically altered scale degree 7 described in my previous examples. In both instances of subject/answer paradigm 3 the repeated scale degree 8 of the subject is mapped onto scale degrees 5 and 4 of the descending fourth-span of the answer. Similar to the above discussion of subject/answer paradigm 1, I suggest the possibility that an $\hat{8}-\hat{7}-\hat{6}-\hat{5}$ structure (thus, featuring a repeated scale degree 7) within the subject may be mapped directly onto the $\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$ of the answer. The current study has been unable to locate an instance of this structure in the literature, so I suggest it as theoretically possible within minor-key fugues featuring a Dorian middleground structure.

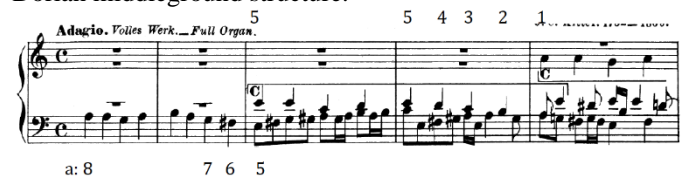


Fig. 11. Kittel, 'Jesus Christus unser Heiland'.

An instance of subject/answer paradigm 4 occurs in a fugue by Johann Ludwig Krebs (1713–1780), an organist and student of Bach (Figure 12). In fact, this fugue was originally thought to be composed by Bach, and bears a number from the BWV *Anhang*. This fugue resembles the famous 'Wedge Fugue' of Bach, BWV 548, in that the subject splits directions in mm. 3–4, with one line rising, through a perfect fourth, while another secondary line descends through a perfect fifth. Notice how the rising fourth line passes directly through the notes of the Dorian fourth-span, again with the characteristic chromatic pitch we've observed in the earlier examples. In the answer, the

wedge-fugue construction is retained, now with a rising fifth-progression and a secondary line descending through a perfect fourth.

Fig. 12. Krebs, Fugue in A Minor, BWV Anh. 181.

5. CONCLUSION

In summary, the Dorian middleground schema pursued in this paper suggests a nuanced explanation of the subject/answer relationship in Baroque fugues, focusing on modal aspects rather than abrupt modulation or routine transposition from subject to answer. While the schema studied here works well at identifying the modal middleground structure of the fugues in question, I do not claim that all minor-key fugues adhere to this set of patterns. For instance, Renwick observes that fugue subjects outlining scale degrees 5, 4, and 3, thus forming partial statements of a descending fifth-progression, are overwhelmingly more common in both books of *The Well-Tempered Clavier*. Furthermore, my paradigm 2 subjects (rising through a fifth-progression) more frequently result in real answers, and may be better explained with another approach, one less wed to the concept of middleground modality as I've proposed here. Moreover, while I would argue that the modal middleground schema reveals an interesting characteristic in these fugues, it is by no means the only notable characteristic, nor even the most important one, of the fugues in question. For instance, the neighboring motion shown in my early examples, nearly ubiquitous in Bach's minor-key fugues beginning on scale degree 5, is regarded merely as decorative to the broader linear progression within this subject/answer paradigm approach. Nevertheless, the Dorian middleground schema presented here provides a means to consider structural modal characteristics in fugue subject/answer patterns, using a Schenkerian-inspired analytical technique. It is hoped that the theories and analyses presented here may lead to further discoveries and interpretations, and to a renewed consideration of the lingering presence of modal characteristics in the fugues of Bach and his contemporaries.

KEYWORDS

Fugue, Schenkerian Analysis, Mode.

REFERENCES

- Aldwell, Edward, and Schachter, Carl, 2003. *Harmony and Voice Leading*. New York (NY): Schirmer Press.
- Bourne, Janet, and Gjerdingen, Robert, 2015. 'Schema Theory as a Construction Grammar', *Music Theory Online* 21/2, <https://mtosmt.org/issues/mto.15.21.2/mto.15.21.2.gjerdingen_bourne.html>, accessed 20/06/2023.
- Burns, Lori, 1995. *Bach's Modal Chorales*. Stuyvesant (NY): Pendragon Press.
- Byros, Vasili, 2012. 'Meyer's Anvil: Revisiting the Schema Concept', *Music Analysis* 31/3: 273–346.
- Clendinning, Jane Piper, and West Marvin, Elizabeth, 2016. *The Musician's Guide to Theory and Analysis*. New York (NY): W.W. Norton.
- Gjerdingen, Robert, 2007. *Music in the Galant Style*. Oxford/New York: Oxford University Press.
- Holm-Hudson, Kevin, 2017. *Music Theory Remixed: A Blended Approach for the Practicing Musician*. Oxford/New York: Oxford University Press.
- Ito, John Paul, 2013. 'Hypermetrical Schemas, Metrical Orientation, and Cognitive-Linguistic Paradigms', *Journal of Music Theory* 57/1: 47–85.
- Jonas, Oswald, 1963. 'Zur realen Antwort in der Fuge bei Bach', in Georg Reichart and Martin Just (eds), *Bericht über den internationalen musikwissenschaftlichen Kongress Kassel*. Kassel: Bärenreiter, 364–366.
- Lester, Joel, 1990. *Between Modes and Keys: German Theory 1592–1802*. Stuyvesant (NY): Pendragon Press.
- Marlowe, Sarah, 2013. *Fugue in Context: A Schenkerian Approach to Select Works by J. S. Bach and Dmitri Shostakovich*. PhD diss. Rochester (NY): Eastman School of Music.
- , 2014. 'Tonal Answers and their Role Within Fugal Expositions: Two Revised Paradigms', *Theory and Practice* 39: 47–73.
- Mattheson, Johann, 1739. *Der vollkommene Capellmeister*. Hamburg: Christian Herold.
- Meyer, Leonard, 1989. *Style and Music: Theory, History, and Ideology*. Chicago (IL): University of Chicago Press.
- Rabinovitch, Gilad, 2018. 'Gjerdingen's Schemata Reexamined', *Journal of Music Theory* 62/1: 41–84.
- Renwick, William, 1991. 'Structural Patterns in Fugue Subjects and Fugal Expositions', *Music Theory Spectrum* 13/2: 197–218.
- , 1995. *Analyzing Fugue: A Schenkerian Approach*. Stuyvesant (NY): Pendragon Press.
- Roig-Francoli, Miguel, 2003. *Harmony in Context*. New York (NY): McGraw-Hill.
- Schachter, Carl, 1999. 'Bach's Fugue in B-flat Major, Well-Tempered Clavier, Book 1, No. XXI', in Joseph N. Straus (ed.), *Unfoldings: Essays in Schenkerian Theory and Analysis*. Oxford/New York: Oxford University Press, 239–59.
- Schenker, Heinrich, 1984. *J. S. Bach's Chromatic Fantasy and Fugue: Critical Edition with Commentary*, trans. Hedi Siegel. New York (NY): Longman. (1st ed. 1910.)
- , 1979. *Free Composition (Der freie Satz)*, trans. ed. Ernst Oster. Hillsdale (NY): Pendragon Press. (1st ed. 1935.)
- , 1954. *Harmony*, ed. Oswald Jonas, trans. Elisabeth Mann Borgese. Chicago (IL): University of Chicago Press. (1st ed. 1906.)
- , 1996. 'The Organic Nature of Fugue, as Demonstrated in the C Minor Fugue from Bach's *Well-tempered Clavier*, Book 1', in *The Masterwork in Music*, vol. 2, ed. William Drabkin. Cambridge: Cambridge University Press, 31–54. (1st ed. 1926.)